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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,714	01/03/2006	Masayuki Tsunekawa	CU-4246 RJS	6911
26530	7590	11/29/2007		
LADAS & PARRY LLP 224 SOUTH MICHIGAN AVENUE SUITE 1600 CHICAGO, IL 60604			EXAMINER THOMAS, ERIC W	
			ART UNIT 2831	PAPER NUMBER
			MAIL DATE 11/29/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/538,714

Applicant(s)

TSUNEKAWA ET AL.

Examiner

Eric Thomas

Art Unit

2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 1/06.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Specification*

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### *Claim Rejections - 35 USC § 102*

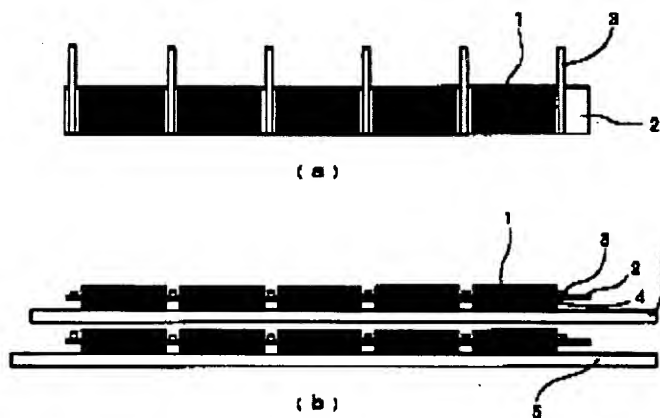
2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

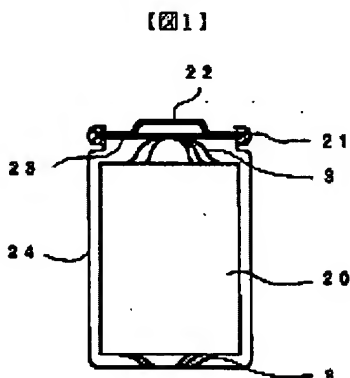
3. Claims 1-2, 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Hiroyuki et al. (JP 2002-270470).

【図3】



Hiroyuki et al. disclose in fig. 3a, 3b, a polarized electrode for an electric double layer capacitor comprising a collector (2) and an electrode active material layer (1) provided at least on one surface of the collector in a predetermined pattern form, wherein the pattern form is at least composed of the electrode active material layer arranged intermittently in longitudinal direction of the collector (see fig. 3a).

Regarding claim 2, Hiroyuki et al. disclose in fig. 3a, 3b, the electrode active material layer (1 – see also paragraph 27) in a pattern form is provided on both surfaces of the collector, the pattern form being the same on both surfaces or different on each surface.



Regarding claim 7, Hiroyuki et al. disclose in fig. 1, 3a, 3b, 7, an electric double layer capacitor having at least a pair of polarized electrodes (3b) for the electric double layer capacitor according to Claim 1, a separator (5) and an electrolytic solution (paragraph 54) sealed in a container (24).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3-6, 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiroyuki et al. (JP 2002-270470) in view of Yoshinaga (JP 08141466).

Hiroyuki et al. disclose a polarizable electrode for an electric double layer capacitor having at least a pair of polarized electrodes, a separator and an electrolytic solution sealed in a container comprising at least steps of: a) providing a collector; b) providing an electrode active material composition; c) forming an electrode active material composition layer in a predetermined form by applying the electrode active material composition on the collector so that a coated section having the electrode active material composition coated on the collector and a non-coated section not having the electroactive material composition coated on the collector are provided in a predetermined period in a running direction of the collector, and drying the electrode active material; d) pressing the collector on which the electrode active material is formed in the pattern form (see paragraph 65).

Hiroyuki et al. disclose the claimed invention except for the method comprises the step of slitting the collector after pressing in a predetermined size.

Yoshinaga (see international search report) teaches that slitting a substrate comprising an active material after a pressing step would form the substrate comprising an active material having a predetermined size.

It would have been obvious to a person of ordinary skill in the art at the time the invention was to form the electrode of Hiroyuki et al. using the method of Yoshinaga,

since such a modification would form multiple polarized electrodes having substantially the same thickness.

Regarding claim 4, Hiroyuki et al. disclose a polarizable electrode for an electric double layer capacitor having at least a pair of polarized electrodes, a separator and an electrolytic solution sealed in a container comprising at least steps of: a) providing a collector; b) providing an electrode active material composition, and drying the electrode active material; d) pressing the collector on which the electrode active material is formed in the pattern form (see paragraph 65).

Hiroyuki et al. disclose the claimed invention except for the method comprises the step of forming the electrode active material composition layer in a predetermined form by applying the electrode active material composition on the collector so that a coated section having the electrode active material composition coated on the collector and a non-coated section not having the electrode active material composition coated on the collector are provided in a predetermined period in a running direction of the collector by a die-coating method in which a die head supplies the electrode active material composition intermittently, and drying the electrode active material layer; and the step of slitting the collector after pressing in a predetermined size.

Yoshinaga (see international search report) teaches an improved method of forming an electric double layer capacitor wherein the method comprises the step of forming the electrode active material composition layer in a predetermined form by applying the electrode active material composition on the collector so that a coated section having the electrode active material composition coated on the collector and a

non-coated section not having the electrode active material composition coated on the collector are provided in a predetermined period in a running direction of the collector by a die-coating method in which a die head supplies the electrode active material composition intermittently, and drying the electrode active material layer; and the step of slitting the collector after pressing in a predetermined size.

It would have been obvious to a person of ordinary skill in the art at the time the invention was to form the electrode of Hiroyuki et al. using the method of Yoshinaga, since such a modification would form multiple polarized electrodes having substantially the same thickness.

Regarding claim 5, Yoshinaga teaches (see international search report) that the c' step comprises a step of c'') forming the electrode active material composition layer in a predetermined form by applying the electrode active material composition on the collector in such a manner that the electrode active material composition is continuously supplied to a die head while the die head moves away and approaches the collector and/or the collector moves away and approaches the die head so that a coated section having the electrode active material composition coated on the collector and a non-coated section not having the electrode active material composition coated on the collector are provided in a predetermined period in a running direction of the collector, and drying the electrode active material layer.

Regarding claim 6, Hiroyuki et al. disclose a polarizable electrode for an electric double layer capacitor having at least a pair of polarized electrodes, a separator and an electrolytic solution sealed in a container comprising at least steps of: a) providing a

collector; b) providing an electrode active material composition, and drying the electrode active material; d) pressing the collector on which the electrode active material is formed in the pattern form (see paragraph 65).

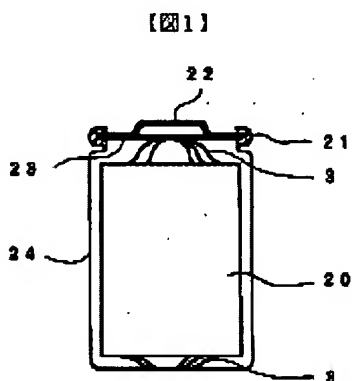
Hiroyuki et al. disclose the claimed invention except for the method comprises the step of c'') forming the electrode active material composition layer in a predetermined form wherein a coated section and a non-coated section of the electrode active material composition is provided on the collector so that the coated section and the non-coated section are arranged in a predetermined period in a running direction of the collector in such a manner that while the electrode active material composition is supplied on a first roll followed by scraping with the use of a comma head to obtain a predetermined amount and the electrode active material composition of the predetermined amount is transferred on the collector running along a second roll by a comma reverse method, the second roll moves away and approaches the first roll, and drying the electrode active material layer; and e) slitting the collector after pressing in a predetermined size.

Yoshinaga (see international search report) teaches an improved method of forming a double layer capacitor wherein the method comprises the step of c'') forming the electrode active material composition layer in a predetermined form wherein a coated section and a non-coated section of the electrode active material composition is provided on the collector so that the coated section and the non-coated section are arranged in a predetermined period in a running direction of the collector in such a manner that while the electrode active material composition is supplied on a first roll



followed by scraping with the use of a comma head to obtain a predetermined amount and the electrode active material composition of the predetermined amount is transferred on the collector running along a second roll by a comma reverse method, the second roll moves away and approaches the first roll, and drying the electrode active material layer; and e) slitting the collector after pressing in a predetermined size.

It would have been obvious to a person of ordinary skill in the art at the time the invention was to form the electrode of Hiroyuki et al. using the method of Yoshinaga, since such a modification would form multiple polarized electrodes having substantially the same thickness.



Regarding claims 8-11, Hiroyuki et al. disclose in fig. 1, 3a, 3b, 7, an electric double layer capacitor having at least a pair of polarized electrodes (3b) for the electric double layer capacitor according to Claim 1, a separator (5) and an electrolytic solution (paragraph 54) sealed in a container (24).

### **Conclusion**

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

JP 04-022117 – electric double layer capacitor

JP 05--304050 – electric double layer capacitor

US 20020061449 – electric double layer capacitor

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Thomas whose telephone number is 571-272-1985. The examiner can normally be reached on Monday - Friday 5:30 AM - 2:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on 571-272-2245. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ewt



11-26-07

Eric Thomas  
Primary Examiner – 2831